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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/767,499	01/23/2004	Alois Nichtawitz	COE-561	5968
30046	7590	06/06/2005	EXAMINER	
HUMPHREYS ENGINEER CENTER SUPPORT ACTIVITY ATTN: CEHEC-OC 7701 TELEGRAPH ROAD ALEXANDRIA, VA 22315-3860			HANAN, DEVIN J	
			ART UNIT	PAPER NUMBER
			3745	

DATE MAILED: 06/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/767,499	NICHTAWITZ ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Devin Hanan	3745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-53 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 13-20,37 and 39-53 is/are allowed.
- 6) Claim(s) 1,2,7,9-12,21-26,29 and 38 is/are rejected.
- 7) Claim(s) 3-6,8,27,28 and 30-36 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 23 January 2004 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    - a) All
    - b) Some \*
    - c) None of:
      1. Certified copies of the priority documents have been received.
      2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
      3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                                                                |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                                                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                                           | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/23/2004</u> . | 6) <input type="checkbox"/> Other: _____                                                |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

Claims 9-21, 21-24 and 38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claims 9, 21 and 38 recite the broad recitation "second structure is permitted to touch said at least one wicket gate in at least one position", and the claim also recites "preferably in the region of said leading edge of said wicket gate" which is the narrower statement of the limitation.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 7, 25, 26 and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Delonge (U.S. Patent 5,472,314).

Delonge discloses a stay vane (fig 2) for use with a turbine configuration having components, comprising:

a first structure (parts 1 and 3), incorporating a leading edge (1) and a trailing edge (edge 29 of 3) with respect to a fluid inlet to the turbine configuration, wherein the first structure supports said turbine configuration at least in part; and

a second structure (2) affixed to the trailing edge of said first structure, wherein the second structure improves hydraulic performance of said turbine configuration by complementing at least one component of said turbine configuration.

Regarding claim 2, Delonge discloses a stay vane with at least one connector (col. 6 lines 47-60) for affixing said second structure to the trailing edge of said first structure.

Regarding claim 7, Delonge discloses a stay vane in which the second structure is affixed to the trailing edge of said first structure by chemically bonding (col. 6 lines 47-60).

Regarding claim 25, Delonge discloses an extension incorporated in a turbine configuration having components to include a first structure (1 and 3) supporting the turbine configuration at least in part,

a first structure incorporating a leading edge (1) and a trailing edge (3) with respect to a fluid inlet to said turbine configuration, the extension comprising:

a second structure (2) affixed to the trailing edge of the first structure, wherein the extension improves hydraulic performance of said turbine configuration by complementing at least one said component of said turbine configuration.

Regarding claim 26, Delonge discloses the extension has least one connector (col. 6 lines 47-60) for affixing said second structure to said trailing edge of said first structure.

Regarding claim 29, Delonge discloses the second structure is affixed to the first structure by chemically bonding (col. 6 lines 47-60).

Claims 1, 2, 7, 25, 26 and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Hagle et al. (U.S. Patent 5,207,558).

Hagle et al. discloses a stay vane for use with a turbine configuration having components, comprising:

a first structure (26), incorporating a leading edge and a trailing edge with respect to a fluid inlet to the turbine configuration, wherein the first structure supports said turbine configuration at least in part; and

a second structure (24) affixed to the trailing edge of said first structure, wherein the second structure improves hydraulic performance of said turbine configuration by complementing at least one component of said turbine configuration.

Regarding claim 2, Hagle et al. discloses a stay vane with at least one connector (hinge pin 34, col. 3 lines 6-16) for affixing said second structure to the trailing edge of said first structure.

Regarding claim 7, Hagle et al. discloses a stay vane in which the second structure is affixed to said trailing edge of said first structure by mechanically bonding (col. 3 lines 6-16).

Regarding claim 25, Hagle et al. discloses an extension incorporated in a turbine configuration having components to include a first structure supporting said turbine configuration at least in part,

a first structure (26) incorporating a leading edge and a trailing edge with respect to a fluid inlet to said turbine configuration, said extension comprising:

a second structure (24) affixed to the trailing edge of said first structure, wherein the extension improves hydraulic performance of said turbine configuration by complementing at least one said component of said turbine configuration.

Regarding claim 26, Hagle et al. discloses the extension has least one connector for affixing said second structure to said trailing edge of said first structure (col. 3 lines 6-16).

Regarding claim 29, Hagle et al. discloses the second structure is affixed to the first structure by any method consisting of mechanically (col. 3 lines 6-16).

***Prior Art***

The patent to Fisher Jr. et al. (U.S. Patent 6,254,339) was cited for its teaching of a hydraulic turbine with extensions on the turbine blades, but no extensions on stay vanes or wicket gates.

The patent to Ouellet (U.S. Patent 5,126,584) was cited for its teaching of a wind mill with the equivalent of stay vanes and wicket gates without extensions.

The patent to Buchelt (U.S. Patent 6,007,297) was cited for its teaching of a pivoting wicket gate (fig 2).

The patent to Beyer et al. (U.S. Patent 5,924,842) was cited for its teaching of a hydraulic turbine with stay vanes and wicket gates, with the extensions on the trailing edge of the wicket gate (400, figure 23).

***Allowable Subject Matter***

Claims 13-20, 37 and 39-53 are allowed.

Claims 9-12, 21-24 and 38 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claims 3-6, 9-12, 27-28 and 30-36 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Devin Hanan whose telephone number is 571-272-6089. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look can be reached on 571-272-4820. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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